TEXAS DEPARTMENT OF INSURANCE

Engineering Services Program / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104 Phone No. (512) 322-2212 Fax No. (512) 463-6693

PRODUCT EVALUATION

WIN-1522

Effective January 1, 2012

The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code** (IRC) and the **International Building Code** (IBC). This product shall be subject to reevaluation in **August, 2015**.

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code and the Texas Engineering Practice Act.

Series 7700/7800 Vinyl Tilt Single Hung Windows, Non-impact Resistant, manufactured by:

General Aluminum Company of Texas, LP 1001 W. Crosby Road Carrollton, TX 75006-6901 (972) 242-5271

will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

The Series 7700/7800 window is a vinyl tilt single hung window. The vinyl tilt single hung windows evaluated in this report are individual, non-impact resistant windows. This product evaluation report is for vinyl tilt single hung windows based on the following tested construction:

General Description:

9	System	Description	Label Rating
	1	Series 7700/7800; Vinyl Tilt Single Hung Window: O/X	H-R50 53 x 72

Product Dimensions:

Syste	m Overall Size	Sash Size	Fixed Daylight Opening Size
1	53 ½ " x 72"	51" x 35 ¾ "	47 ¾ " x 31 ¾ "

Glazing Description:

I	System	Glass Construction 1	Glazing Method ²	
	1	IG-1	GM-1	

Note:

¹ See the "Glass Construction Key" for the glazing construction.

² See the "Glazing Method Key" for the glazing method description.

Glass Construction Key:

IG-1: The fixed sash and the operable sash contain sealed insulating glass units. The sealed insulating glass units are comprised of two double strength ($\frac{1}{8}$ ") annealed glass lites lass lite separated by a $\frac{1}{2}$ " Dura Seal airspace. The glass thickness and type used in the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

Glazing Method Key:

GM-1: The insulating glass unit is set from the interior onto a bed of Schnee Morehead, Curasil sealant and secured with a rigid vinyl snap-in glazing bead around the interior perimeter.

Frame Construction: The frame members are manufactured from extruded vinyl (PVC). The frame corners are mitered and welded construction. The fixed horizontal meeting rail is secured to the frame jambs using two (2) screws per jamb. An extruded aluminum reinforcement insert is applied inside the sill.

Sash Construction: The sash members are manufactured from extruded vinyl (PVC) and fully reinforced with steel. The sash corners are mitered and welded construction.

Reinforcement: Steel reinforcement is incorporated inside the sash stiles, sash bottom rails, sash top rail (lock rail) upper cavity, and the sash top rail (lock rail) lower cavity. Aluminum reinforcement is incorporated inside the fixed interlock (meeting rail) cavity and at the interior face of the frame sill. The reinforcement extends the length of the members.

Hardware:

- Metal cam locks with keepers; Two (2) required; Located 7 ½ " from the left and right ends of the sash top rail (lock rail).
- Tilt latches; Two (2) required; Located at the left and right ends of the sash top rail.
- Metal pivot bars; Located at each end of the bottom rail.
- Sash balances; One (1) Quad-Stack Constant Force (½ " coil size) balance required for each of the two jambs.

Product Identification: A certification program label (AAMA) will be affixed to the window. The certification program label includes the manufacturer's code name (**GA-1**); product name: **Series 7700/7800 SH**; performance characteristics; the approved inspection agency (AAMA); and the following applicable standard: AAMA/WDMA/CSA 101/I.S.2/A440-05.

LIMITATIONS

Design pressures:

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressures (psf)
1	53 1/8	72	± 50

Impact Resistance: These window assemblies do not satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These window assemblies will need to be protected with an impact protective system when installed in areas where windborne debris protection is required.

Acceptance of Smaller Assemblies: Window assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

INSTALLATION INSTRUCTIONS

General: The window assembly shall be installed in accordance with the manufacturer's installation instructions. Detailed drawings and installation instructions are available from the manufacturer.

Installation: The wood wall framing members shall, at minimum, consist of Southern Pine lumber dimension lumber. The window assembly shall be secured to the wall framing through the window nailing fin with minimum No. 8 x 1 $\frac{5}{8}$ " wood screws. The fasteners shall be located approximately 3 inches from each corner and approximately 9 inches on center along the perimeter of the window. The fasteners shall penetrate a minimum of 1 $\frac{1}{2}$ inches into the wall framing.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.